



Complete Summary

TITLE

Nuclear medicine - radionuclide bone imaging: percentage of patients, regardless of age, undergoing bone scintigraphy, considered to be potentially at risk for fracture in a weight-bearing site for whom there is documentation of direct communication to the referring physician within 24 hours of completion of the imaging study.

SOURCE(S)

Society of Nuclear Medicine (SNM), Physician Consortium for Performance Improvement®. Nuclear medicine: radionuclide bone imaging physician performance measurement set. Chicago (IL): American Medical Association; 2008 Feb 29. 14 p. [6 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients, regardless of age, undergoing bone scintigraphy, considered to be potentially at risk for fracture in a weight-bearing site for whom there is documentation of direct communication to the referring physician within 24 hours of completion of the imaging study.

RATIONALE

Physician communication of serious risk to patients with conditions such as bone metastases with lesions in weight bearing bones, occult fractures, injuries from child abuse or falls, is crucial to appropriate patient care. Quality of life after a

fracture through a site of tumor in bone is markedly reduced. Many adverse patient outcomes can be prevented by communicating urgent findings with the referring physician. Literature suggests that as many as 30% of Radiology reports contain errors, regardless of the imaging modality, Radiologist's experience, or time spent in interpretation. A survey from the Physician Insurers Association of America (PIAA) demonstrated that "communication failure was the fourth most common primary allegation in malpractice lawsuits against US radiologists, and that 60% of communication-related claims resulted from failure to highlight an urgent or unexpected abnormal result." Another study indicated that in 60% of the malpractice cases, the radiologists failed to directly contact the referring physician regarding urgent or significant unexpected findings; in 10% of cases, the written report was not issued in the appropriate time; and in 10% of cases, the report was sent to the wrong physician or patient. The Florida Radiological Society disclosed that 75% of claims against radiologists in 1997 to 1999 stemmed from communication errors. The PIAA dealt with 243 communication-related radiology claims in 1994 to 2004 with a total indemnity liability of \$16 million.

The most common error cited has been the failure by a radiologist to directly contact the referring clinician about urgent, clinically significant, and unexpected findings. The 4 specific situations in which "direct contact" is required, according to the American College of Radiology's (ACR's) standard for communication, are:

1. Findings requiring immediate medical intervention
2. Conclusions of the radiologist that differ from prior interpretations
3. Findings that suggest a likely worsening condition if not treated
4. Unclear findings that require direct follow-up

The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure:

According to the Society of Nuclear Medicine (SNM) procedures guidelines for General Imaging, the reporting of specific findings that constitute "Direct Communication" should be employed when:

- Findings likely to have a significant, immediate influence on patient care should be communicated to the requesting physician or an appropriate representative in a timely manner.
- Actual or attempted communication should be documented as appropriate.
- Significant discrepancies between an initial and final report should be promptly reconciled by direct communication. (SNM, 2004)

PRIMARY CLINICAL COMPONENT

Nuclear medicine; radionuclide bone imaging; bone scintigraphy; risk for fracture in a weight-bearing site; documentation of direct communication to referring physician within 24 hours

DENOMINATOR DESCRIPTION

All patients, regardless of age, undergoing bone scintigraphy, considered to be potentially at risk for fracture in a weight-bearing site (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Patients with documentation of direct communication to the referring physician within 24 hours of completion of the imaging study (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Procedure guideline for general imaging.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

All ages

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component**INCIDENCE/PREVALENCE**

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

See the "Rationale" field.

UTILIZATION

Unspecified

COSTS

See the "Rationale" field.

Institute of Medicine National Healthcare Quality Report Categories**IOM CARE NEED**

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure**CASE FINDING**

Users of care only

DESCRIPTION OF CASE FINDING

All patients, regardless of age, undergoing bone scintigraphy, considered to be potentially at risk for fracture in a weight-bearing site

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All patients, regardless of age, undergoing bone scintigraphy, considered to be potentially at risk for fracture in a weight-bearing site*

*Examples of a *weight-bearing site* would include: location of a lesion, new lesion in a weight-bearing region, increasing intensity and/or area of a previously noted lesion, etc.

Exclusions

Medical reason for not documenting direct communication** to the referring physician within 24 hours of completion of the imaging study (e.g., previously reported prior lesion in same location with no evidence of progression or regression, negative scan)

***Direct communication* is defined as communication by the diagnostic imager or a designee to the treating or referring physician or his/her representative with confirmed receipt of the findings (verbal communication, certified letter, or by any electronic transmission with receipt or documentation that the communication was received).

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Diagnostic Evaluation
Encounter

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Patients with documentation of direct communication* to the referring physician within 24 hours of completion of the imaging study

**Direct communication* is defined as communication by the diagnostic imager or a designee to the treating or referring physician or his/her representative with confirmed receipt of the findings (verbal

communication, certified letter, or by any electronic transmission with receipt or documentation that the communication was received).

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Measure #2: communication to referring physician of patient's potential risk for fracture for all patients undergoing bone scintigraphy.

MEASURE COLLECTION

[The Physician Consortium for Performance Improvement® Measurement Sets](#)

MEASURE SET NAME

[Nuclear Medicine: Radionuclide Bone Imaging Physician Performance Measurement Set](#)

SUBMITTER

American Medical Association on behalf of the Physician Consortium for Performance Improvement® and Society of Nuclear Medicine

DEVELOPER

Physician Consortium for Performance Improvement®
Society of Nuclear Medicine

FUNDING SOURCE(S)

Unspecified

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FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2008 Feb

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

Society of Nuclear Medicine (SNM), Physician Consortium for Performance Improvement®. Nuclear medicine: radionuclide bone imaging physician performance measurement set. Chicago (IL): American Medical Association; 2008 Feb 29. 14 p. [6 references]

MEASURE AVAILABILITY

The individual measure, "Measure #2: Communication to Referring Physician of Patient's Potential Risk for Fracture for All Patients Undergoing Bone Scintigraphy," is published in the "Nuclear Medicine: Radionuclide Bone Imaging Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by email at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on February 24, 2009. The information was verified by the measure developer on April 13, 2009.

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